QUESTION SET-9

**QUESTION-1: Events Collection**

**a) Retrieve all events organized by "TechCorp" that have more than 50 participants.**

db.Events.find({

organizer: "TechCorp",

participants: { $size: { $gt: 50 } }

})

**b) Find events scheduled to occur on both "Saturday" and "Sunday".**

db.Events.find({ schedule: { $all: ["Saturday", "Sunday"] } })

**c) Identify events where the details document specifies a budget greater than $10,000.**

db.Events.find({ "details.budget": { $gt: 10000 } })

**d) Sort events in descending order of their start date and limit to the top 5 records.**

db.Events.find()

.sort({ "details.startDate": -1 })

.limit(5)

**e) Group events by their organizer and count the total events per organizer.**

db.Events.aggregate([

{ $group: { \_id: "$organizer", totalEvents: { $sum: 1 } } }

])

**QUESTION-2: Attendees Collection**

**a) Retrieve attendees who have attended more than 3 events but do not prefer "Networking".**

db.Attendees.find({

eventsAttended: { $size: { $gt: 3 } },

preferences: { $ne: "Networking" }

})

**b) Find attendees who have attended both "Tech Summit 2023" and "AI Conference 2023".**

db.Attendees.find({ eventsAttended: { $all: ["Tech Summit 2023", "AI Conference 2023"] } })

**c) Display names and contact details of attendees whose ticket type is "VIP".**

db.Attendees.find(

{ ticketType: "VIP" },

{ \_id: 0, name: 1, contact: 1 }

)

**d) Create a compound index on ticketType and contact.email for uniqueness.**

db.Attendees.createIndex(

{ ticketType: 1, "contact.email": 1 },

{ unique: true }

)

**e) Aggregate to project attendee’s name, ticket type, total attended events, and filter attendees with fewer than 2 events.**

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db.Attendees.aggregate([

{ $project: { name: 1, ticketType: 1, totalEvents: { $size: "$eventsAttended" } } },

{ $match: { totalEvents: { $gte: 2 } } }

])